

CLAIMS

1. ~~Coextrusion binder comprising:~~

- 5 to 30 parts of a polymer (A), itself comprising a blend of a polyethylene (A1) of relative density between 0.910 and 0.940 and of a polymer (A2) chosen from elastomers, very low-density polyethylenes and metallocene polyethylenes, the (A1) + (A2) blend being cografted with an unsaturated carboxylic acid;

- 95 to 70 parts of a polyethylene (B) of relative density between 0.910 and 0.930;

- the blend of (A) and (B) being such that:

. its relative density is between 0.910 and 0.930,

. the content of grafted unsaturated carboxylic acid is between 30 and 10,000 ppm,

. the MFI (ASTM D 1238, 190°C/2.16 kg) is between 0.1 and 3 g/10 min., MFI standing for the melt flow index.

2. ~~Binder~~ ^{A binder} according to Claim 1, such that its relative density is between 0.915 and 0.920.

3. ~~Binder~~ according to Claim 1 or 2, in which the comonomer of (A1) is the same as that of (B).

4. Binder according to any one of the preceding claims, in which (A), that is to say cografted (A1) + (A2), is such that:

- (A1) comprises at least 75 mol% of ethylene and has an $MFI_2/[\eta]^{-8.77}$ ratio greater than 15 in absolute value;

- (A2) comprises at least 50 mol% of ethylene;

- (A2) has an $MFI_2/[\eta]^{-8.77}$ ratio greater than 15 in absolute value;

- its ethylene content is not less than 70 mol%;

- the MFI_{10}/MFI_2 ratio is between 5 and 20, where MFI_2 is the melt flow index at 190°C under a load of 2.16 kg, measured according to ASTM D 1238, and MFI_{10} is the melt flow index at 190°C under a load of 10 kg according to ASTM D 1238, the intrinsic viscosity $[\eta]$

denoting the viscosity index in dl/g of a polymer measured in a decalin solution at 135°C.

- sub
A 4
5. Multilayer structure comprising a layer comprising the binder of any one of the preceding claims and, directly attached to the latter, a layer (E) of nitrogen-containing or oxygen-containing polar resin, such as a layer of polyamide resin, of an aliphatic polyketone, of a saponified ethylene-vinyl acetate copolymer (EVOH) or of a polyester resin, or else a metal layer.
6. Structure according to Claim 5, in which either a polyolefin layer (F) or a layer of a resin chosen from the resins of the layer (E) or a metal layer is directly attached on the binder side.
7. Structure according to Claim 6, respectively comprising an HDPE layer, a layer of the binder of the invention, a layer of EVOH or of an EVOH alloy, a layer of the binder of the invention and an HDPE layer.
8. Rigid hollow bodies consisting of a structure according to any one of Claims 5 to 7.
9. Petrol tank comprising a structure according to Claim 7.
- add
B2
- add
A3
- ADD
D2
D1